

1667
16.38 17

KERALA PAST AND PRESENT

VOLUME I
PREHISTORIC ARCHAEOLOGY

L. A. KRISHNA IYER

It is at long intervals that an authoritative and thought-provoking book on ethnology comes out in our land where study and research in the life of man is not in a bad way. This book on the Prehistoric Archaeology of Kerala written by one who has made a contribution to the growth of anthropological study in India will be welcomed by scholars and students of the subject over the world over.

No part of India is more rich or interesting for the study of social institutions than Kerala, and its geographical position renders it specially important for the archaeologist and annalist.

In the present volume, the first of a series under the general caption *Kerala—Past & Present*, Mr. L. A. Krishna Iyer of the University of Madras has endeavoured "to sift from the verbiage of information about the prehistoric antiquities of Kerala and arrange them in their proper perspective with the aid of ethnology on the basis of European methods"—in short, "to tell the history of human progress of the earliest man" in the light of modern developments.

Rs. 3/8

THE
PREHISTORIC ARCHAEOLOGY
OF KERALA



THE PREHISTORIC ARCHAEOLOGY OF KERALA

BY

L. A. KRISHNA IYER, M. A.,

Head of the Department of Anthropology, University of Madras;

Formerly Officer in charge of Ethnographic Survey of

Travancore; Corresponding Member of Societa

Italiana D' Antropologia Etnologia E.

Psicologia Comparata;

Author of "Travancore Tribes and Castes";

etc. etc. etc.

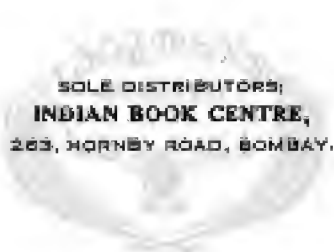
WITH A FOREWORD

BY

J. P. MILLS, M. A., I. C. S.,

(Honorary Director of Ethnography, Assam)

FIRST PUBLISHED, FEBRUARY, 1948.
COPYRIGHT



SOLE DISTRIBUTORS;
INDIAN BOOK CENTRE,
263, HORNBY ROAD, BOMBAY.

PRINTED AT THE ALLIANCE PRINTING WORKS,
GOCHAR ROAD, CHALAI, TRIVANDRUM
AND PUBLISHED BY L. K. S. RATNAM, THYCAD, TRIVANDRUM.

TO
MY WIFE



FOREWORD

THE geographical position of Kerala renders it specially important for the historian and archaeologist. Cut off as it is from the main peninsular India by the Western Ghats its land communications have always been difficult and streams of migration have tended to pass it by, as the predominance of ancient physical types on the Malabar Coast shows. The Rigvedic immigrants, though they knew of Kerala, do not appear to have reached it in any numbers and, as ancient traditions claim, it is the land of Shiva, whose image has been found at Mohenjo-Daro and who, it is now generally agreed, is a pre-Rigvedic deity. The physical types of Kerala, the Dravidian speech and, not the least, the megalithic monuments which Mr. Krishna Iyer so fully describes, all point to a link with the Mediterranean by way of Asia Minor, just as does the culture of Mohenjo-Daro, and this link extends to the far Western Isles of Europe in one direction

and to Indonesia in the other. The author, therefore, when writing of the prehistoric archaeology of Kerala is not dealing with something of merely local interest but with relics, fortunately preserved by partial isolation, of what, to the best of our knowledge, has been the dominant culture of the temperate and subtropical zone of Europe and Asia in the third millenium B. C.

There is every reason to hope that in secluded Kerala there have survived not only material remains of the remote past, but, enshrined in tradition and ancient custom, invaluable clues to the social and religious culture of those times. All scholars will, therefore, hope that this treatise, to which I have the honour of contributing a foreword, will be followed by others dealing with all aspects of Parasurama's land.

J. P. MILLS.

PREFACE

IT was Alexander Pope who said that the proper study of mankind is man. Modern trends tend to belittle the value of scholarship and to under-rate arts and humanities in favour of the sciences. The partisans of science are never tired of declaring that the proper study of mankind is inanimate nature, but the weight and dignity of tradition is on the side of humanities. "They stand for the ancient manner, the exquisite grace, the mellow light, and the softer shadows of time."

Educated men and women cannot adequately discharge their duties as citizens without an understanding of the beliefs and motives underlying the daily observances and religious rites of their fellow citizens. At a time when primitive passions run high even among civilized nations, the need for the study of humanities (anthropology), during the most impressionable years of one's life, seems all the greater.

The study by men of different races and religions of the customs and manners of one another may help in promoting mutual amity and knitting closely the bonds of unity between them and eventually also help in banishing much of the communal animosity which is the bane of the national life of the present day.

Animated by such thoughts, the *Pre-historic Archaeology of Kerala* is being published, as the first of a comprehensive series under the general caption *Kerala—Past and Present*, in keeping with the Pan-Kerala movement.

The author is deeply grateful to Mr. J. P. Mills, Honorary Director of Ethnography, Assam, for his valuable foreword, and to the Government of Travancore for the loan of the blocks.

Department of Anthropology, }
University Buildings, }
Chepauk, Madras. }

L. A. Krishna Iyer.

CONTENTS

CHAPTER	PAGE
I Introduction	1
II Distribution of Prehistoric Monuments ...	6
III Neolithic Monuments in Travancora ...	11
IV Prehistoric Archaeology of Cochin ...	22
V Prehistoric Monuments in Malabar ...	26
VI Age of Megalithic Monuments ...	32

LIST OF PLATES

	<i>Facing Page</i>
1. A view of dolmens in Anjanad	1
2. A view of two typical dolmens	5
3. A dolmen in Anjanad with rubble stone packing	9
4. A dolmen of small size in Rani Reserve	14
5. A miniature dolmen of the Malayarsyan	19
6. Circular cap-stone exposed in an underground tomb in Malabar	28



A View of Dolmens in Anfield (See p. 14)

THE PRE-HISTORIC ARCHAEOLOGY OF KERALA

CHAPTER I

ARCHAEOLOGY in Kerala remained till recently a virgin field for research. The paucity of research was due to the absence of trained workers with a diversity of knowledge. According to one scholar, it is the science of antiquities previous to the earliest human documents.¹ This view is not generally accepted, as it takes stock of only countries which possessed documentary evidence for centuries and leaves out of account those primitive peoples, who, up to our own times, have lived outside history. It should, therefore, include all peoples and all those questions of man's existence of which written records by the peoples concerned are wanting. In the words of J. de Morgan, it applies to the most remote as to contemporary times, for it is impossible to dissociate ethnography, that is, the study of modern homogeneous groups from that of peoples of whom classical writers speak of from the study of men known to us by the traces they have left, men whose name is lost to posterity. In short, it will be more precise to state that the study of archaeological pre-history deals with peoples who have not been written

1. Jacques de Morgan, "Préhistorie Man", pp. xx.

their annals. Here ethnography merges with pre-historic archaeology since it begins with history.

Sir Leonard Woolly, the distinguished archaeologist, stressed on the want of sufficient contact between archaeologists and anthropologists, and suggested an interesting possibility of unravelling the problem of the past by significant survivals among existing peoples. He thinks that more light may be thrown on the problem of ancient burial customs in South India by the survivals among backward tribes than by direct archaeological evidence.

It may not be out of place to point out that the pre-historic branch of ethnographic studies began as a French science. The archaeology of the pre-historic remained a mere subdivision of ethnography until it was perceived, with the aid of geology, that traces of man in the alluvium, in caverns and in soils contributed materials of great importance to the study of origins. Thanks to the researches of M. Boule, Tournal, and Abbe Breuil, evidences multiplied, though the thinking world was at first incredulous.

It shall be my endeavour to sift from the scrap-heap of information about the pre-historic antiquities of Kerala and arrange them in their proper perspective with the aid of ethnology on the basis of European methods. My endeavour shall be to retell the history of human progress of the earliest man particularly in Kerala, which comprises of the States of Travancore, Cochin and the district of British Malabar, in the light of modern developments in Europe and India. Fergusson

treated a part of the subject in his *Rude Monuments of all Countries*, while Logan made a survey of the *Old Chipped Stones of India*. As Head of the Geological Survey of India, Bruce Foote was the first to make a notable contribution by the publication of his *Pre-historic Antiquities*. In 1923, Pancharan Mitra, in his work on *Pre-historic India* put forward a classification of the Stone Age cultures of India on the analogy of European culture sequences on typological grounds. It was not, however, till the recent Yale-Cambridge India Expedition led by Hellmuth de Terra that definite stratigraphic evidence for the age-sequences of the Indian Stone Age cultures was discovered. Attention was drawn to the significance of these discoveries by Sir John Marshall in 1924 in his *Mohenjodaro and the Indus Civilization* in 1931. The results of excavations at Mohenja-daro and elsewhere revolutionised all existing ideas, not only on the origins of the Indian, but also on that of human civilisation in general.

In Southern India and the Deccan, where the megalithic remains occur in largest numbers, excavations took place very early and in the accounts published by Meadows Taylor and Brooks in the latter part of the nineteenth century, we are in possession of materials of the highest value. Since then a considerable amount of work has been done by Longhurst, Hunt, Munro, Wakefield, Yashwan, Richards and others. Thus, the science which was born in France has spread to every continent.

The pre-historic archaeology of Kerala can therefore only be said to be in the making. Her traditional

ancient history is enshrined in *Kerala Mahatmyam* and *Keralatpathi*. They recount that the axe-bearing incarnation of Vishnu (Parasurama) was obliged by the Rishis to expiate the sin of having slain his mother by extirpating the Kshatriyas, the enemies of the Brahmanas. This he accomplished in twentyone expeditions. At Viswamitra's suggestion he then made over all the land within the four seas to the Rishis with all the blood-guiltiness attached to it, by making them drink the water of possession. The Brahmanas turned him out of the land he thus gave away, but, with Subramania's assistance, he obtained by penance from the God of the seas, Varuna, the grant of some land to dwell on. The throw of his axe was to determine the extent. He threw it from Gokarnam to Kanyakumari (Cape Comorin).

The Gods came to visit the land thus miraculously won and called it Parasurama's land, and Shiva condescended to be worshipped at Gokarnam, the metropolis of the province thus reclaimed from the sea. To people the land, Parasurama is said to have brought first of all a poor Brahmin from the banks of the Krishna river. This man had eight sons and the eldest was made the head of all the Brahmanas of Kerala and located, some say, at a place near Gokarnam and others say at *Tristhaperur* (Trichur) in the Cochin State. Other Brahmanas were next brought and located in sixty-four *gramams* (villages). Ships with seeds and animals next came, also eighteen *Samanthas* (sons of Brahmanas and Kshatriya women) also *Valshyas* (Chettis) and *Sudras* and the low castes.⁹

9. Logan, "Manual of Malabar", p. 291.



A View of typical Dolmens in Anjourn (Roo p. 12)

The extermination of the Kshatriyas referred to in the above legend may be considered as pointing to the struggle between the Brahmins and the Kshatriyas in which the mythical hero is supposed to have played a part. He is supposed to have been the leader of a band of Brahmin colonists, who pressed from behind, had to seek fresh lands and pastures new. This is said to have taken place between 1400 and 1000 B. C. There can scarcely be any doubt that Kerala was known to the Aryans at a very early period at least in the first half of the fourth century.⁵ In the absence of direct evidence bearing on the question of the first settlers of Kerala, we have to rely on evidence derived from materials scattered all over Kerala in the forests in the shape of dolmens, cairns, and stone cellars.



5. Ananthakrishnan Aiyar, L. K., "Lectures on Ethnography", p. 42.

CHAPTER II.

Distribution of Pre-historic Monuments

THE distribution of pre-historic monuments follows the zones of the primitive tribes in India. They are found in Assam, Chota Nagpur, South India, and North-Western Frontier regions. They exist over the whole country drained by the Godavari, more commonly in the valleys of the Krishna, and on both sides of the ghats through Coimbatore as far as Cape Comorin. "Pre-historic dolmens or burial cairns, in which are found bones, stones and other implements, pottery, and beads are to be met with here and there, especially in the upland tracts of the country, and the people who found their sepulchre in these cairns must have been among the first settlers of Kerala. Subjugated and harassed by the succeeding waves of immigrants or invaders, the race seems to have become extinct many centuries ago, and left no trace behind them except their own sepulchres".¹ The men of the Bronze Age used to bury their dead either in an unburnt condition or after cremation, and raised burial mounds over them. The ashes of the cremated bodies, together with tools, weapons, and utensils are often placed in or beneath urns. In Travancore they are found in the Anjanad valley and the Cardamom Hills. The dolmens are found on both banks of the Pambanar in the Anjanad valley and command a wide view of the surrounding

1. Achutha Menon, C., "Cochin State Manual", p. 80.

country so as to be eminently suitable for defence. On the Highlands they are larger in size than in the Lowlands, where they exhibit a progressive deterioration in size. The great concentration of dolmens is in Bellary where they are as many as 2127 dolmens. Such concentration of dolmens is found in the Anjanad valley in Travancore. The custom of burying the ashes and bones in pots prevails among some castes, and Logan thinks it to be the latest development of the art which dictated the construction of the megalithic monuments.

Purpose of Megalithic Monuments

Respect for the dead seems to have been a prominent characteristic of man in the palaeolithic or neolithic periods. The most interesting aspect of neolithic life lay in the rituals of the dead which consisted in the raising of works of rough stone over the dead who were buried in urns. The idea was that the spirit of the dead should be given a location as in life and that the chamber of the dead should be the proto-type of the home. They apprehended that "unless the departed spirit had a home and other things as in life, it would hover restless and troublesome around its old abode doing thereby harm to the living".¹ To accommodate the spirit they constructed various megalithic monuments which were rude structures built of large pieces of stone.

We get an imperfect glimpse of the remote past from Ward and Conner who stated "that there is no

3. Rangachari, V., "Prehistoric India", p. 111.

monument deserving particular notice. The *pandukushies* or barrows, those remains of primeval customs so common throughout the Peninsula, are also found here, though they are not numerous. In one opened by me at Chokkanad there was found to be a large earthen jar containing a few rice husks".⁶ Menhirs have been observed in parts of North Travancore and Cochin. When the Varkala tunnel was bored old pots and human skeletons were found. These remains indicate that the tracts were inhabited by the same race of men that constructed the *pandukushies* of the adjoining British tracts. The absence of any implements associated with such burials indicates their antiquity.⁷

Coming to modern times, the late Dewan Bahadur Dr. L. K. Ananthakrishna Iyer made a notable contribution on the subject to the *South Indian Encyclopedia* and Mr. K. K. Seng Gupta, a distinguished geologist in Cochin (1910-1913) published the results of his researches on the megalithic monuments of the State in the *Journal of the Indian Anthropological Institute*. The present writer published the results of his researches in Travancore in the *Census Report for 1931 (Travancore)* and the third volume of *The Travancore Tribes and Castes*, while Mr. Vasudeva Poduval, Director of Archaeology, Travancore, made a notable contribution by his excavations in the High Ranges. Dr. A. Ayyappan published a valuable account of his

6. Ward and Coomax, "Memoria of Travancore Survey" p.10.

7. Nagamiah, V., "The Travancore State Manual"



A Dolmen in Anjanad showing coursed masonry on the cover slab (See p. 14)

excavations in North Malabar in the *Journal of the Mythic Society*, Bangalore.

The study of primitive people living in our own day and thus coming within the range of modern pre-history is extremely useful in helping us to an understanding of the customs of the earliest inhabitants of our land. Like the Vedies of Ceylon, the Malapentarams of Travancore afford us a ready example. Their customs bespeak a people devoting little thought in their subsistence, which Nature provides in abundance. Their dwellings are of the simplest character, being rock-shelters or break-winds resting on a junglewood post or small huts made of junglewood posts and wild plantain leaves. Weapons they have none but the digging spud. They live by hunting or on tubers which they find in the jungle. The dead are buried where they die. They illustrate the gradual disappearance of a people without leaving any archaeological trace.

The occurrence of rock played an important part in the selection of sites for habitation by palaeolithic man. We find thicker settlements in Southern India than in Northern India. It is in the river districts of Southern India that palaeolithic man is traced most often exhibiting various stages of culture. The Billa Surgam caves of Karnul offer us a sure proof of very early palaeolithic cave-dwellers in Southern India. It appears to have been resorted to from very early times to neolithic times by a race who were mighty hunters like the Malapentarams of Travancore. We have as far no evidence of palaeolithic man or his industry in Kerala,

as quartzite is not found in abundance. Further, palaeolithic man appears to have scrupulously avoided to clear and explore forest regions which was difficult with his crude primitive weapons. Thus while in the Deccan plateau and East coast, palaeolithic man lived, Kerala was without any human life.⁸

The palaeolithic passed into the neolithic in Southern India, which became the emanating centre of the later neolithic culture over other parts of India. Throughout the world we see a number of innovations emanating with neolithic industry. This phase of development of human intelligence opened up the real high road to progress. Travancore, Cochin and Malabar teem with monuments to illustrate this phase of culture.



8. A Guide to the study of the antiquities of the Stone Age, pp. 118-124.

CHAPTER III

Neolithic Monuments in Travancore

THE New Stone Age is marked by the steady development of social and religious ideas, the steady improvement of tools, weapons, and utensils, the extended conquest of material, and the laying down of all the essential bases on which the society of the present would be resting. Men were bent on improving their hammers and axes, on raising the standard of comfort, and on evolving an impressive and worthy form of burial for their leaders. They became very practical and very religious.

The dolmens are rude structures of large unhewn stone resting on two or more others placed erect. They are found scattered on the long chain of wooded hills in Travancore. They are generally considered to be 'stones of the monkeys of India', but most of the primitive people of Travancore have no knowledge of them nor do they evince any interest in them. The people of Anjannad call them *valividus* or abodes of monkeys. Of their antiquity, Professors Macdonell and Keith point out references in the *Rig-Veda*, while the late Gopinatha Rao refers to passages in *Tolkapiyam* and *Purananuru*. The Uralis call them *pandubushies*, pits made by the Pandus or Pandavas, to whom ancient mysterious monuments all over India are generally ascribed. They are looked upon by the credulous as sacred and dangerous. It is said that peasants in France will not take shelter under them or go near

them at night, but the Vellalas and Malapulayas of Anjanad have no such fear. They sit under them when they graze their cattle. Dr. Borlase and Dr. Stukeley in England think that dolmens were connected with the activities of a shady priesthood. It is averred by Walhouse that the people who built them were a race of dwarfs about a span or cubit high, but the results of excavation unfold a different tale. The bones found are neither of dwarfs nor of giants, but men of ordinary stature and stone-slabs used for monuments indicate that they were cut from solid rock and carried some distance, and the people were physically equal to the present race of men.

The Uralis of Travancore believe that dolmens are places where treasure is hidden. But no such treasure has been found in any of them. Dolmens are burial chambers in which people of late neolithic times buried their people of importance. In Travancore they are invariably found on the crests of hills in the Ranni Reserve, and they are built of unhewn blocks of stone. In the erection of dolmens, certain architectural methods and principles are observed. By the use of ortho-static rock, the maximum of wall area was provided with the minimum of thickness. With the upright wall technique went hand in hand the roofing of narrow spaces by means of horizontal slabs laid across on the top of the uprights. The second feature of megalithic monuments was the use of more or less coursed masonry set without mortar, each block lying on its side, and not its edge. A series of uprights is first put in position, and over these are laid several

courses of rather smaller stones.⁹ A variant of the latter is found in the Anjanad valley.

Types of Dolmens

According to Col. Meadows Taylor, the dolmens are of two kinds, those consisting of four stones, three supporting stones and one capstone, leaving one side open, and those in which the chamber is closed by a fourth stone; in the latter case, the fourth stone has a circular stone in it. Both these types of dolmens are found in Travancore. The dolmen at Kadukutti in the Ranni Reserve is rectangular and the position above ground is 8 ft. x $2\frac{1}{4}$ ft. in dimensions. It has only one gallery. Lengthwise it has only one single upright on one side and two others on the opposite side. Sideways there is one on each side. The floor is paved with a single stone slab. The capstone is 7 ft. x $7\frac{1}{2}$ ft. and is rudely triangular. The dolmen is situated on the crest of a hill. It appears to have been a dolmen of the earliest times as it is built of unburnt blocks of stone. The presence of stones lying scattered around the dolmen shows that it might have been covered with them. Excavation yielded no results.

Maisee found another group of dolmens on the hills inhabited by the Malayarayans. They stand north to south with a circular opening facing the south. A rude stone is fitted to this aperture with another acting as a lever to prevent its falling out. The stones, like stones at the top and bottom, are single slab." To this day,

9. Fergusson, "Bough-Stone Monuments", p. 46d.

10. Maisee, "Native Life in Travancore".

the Aryans make similar little cells of stone, the whole forming a box, a few inches square.

Dolmens are also found at Peranthalpara, on both sides of the Thalayar or Pambanar river, a small tributary of the Amaravati, which flows into the Cauvery. Here on a flat level rocky tableland, are seen a large number of dolmens in groups of three, four, or five. Around each group is a circular packing of roughly hewn stones or boulders. These groups of dolmens are found distributed in a circle. The disposition of the majority of the dolmens is east to west. A few are also in the north to south direction. The upright stones are rectangular in shape and are about 10 ft. long, 6 ft. broad and 7 ft. high. The cover slab is 17 ft. \times 7 ft. 8". The floor is paved with a flat stone slab 9 ft. \times 4 ft. 6". The inner chamber is 9 ft. \times 4 ft. Over some of the cover slabs are found remnants of rubble stone packing. There is a semi-circular entrance to the dolmen on one side. Most of the dolmens have four uprights, but one dolmen in some groups has only three uprights and one capstone, thus leaving one side open. At Vadditupara in the Malayattur Reserve there is a dolmen consisting of four uprights, but it is smaller and cruder in shape than those found in the Arichad valley.

Excavations in Vandavasi

The State Archaeologist, Mr. Vasudava Poduval conducted extensive excavations in Tengakkal near Vandiperiyar on the High Ranges. In sist I, the measurements of the capstone were on an average 9 ft. 6 inches in length, 6 ft. 10 inches in breadth and 1 foot in thickness, and the area excavated was 10 ft. \times 8 ft.



A. Loebman in Femi Reserve (Bau p. 14)

to a depth of $4\frac{1}{2}$ ft. Two burial urns were unearthed, one of which was 5 ft. 3 inches in circumference at the mouth, 7 ft. 1 inch in the middle and 2 ft. 10 inches in height. The smaller urn had a circumference of 3 ft. 8 inches at the mouth, 5 ft. 6 inches at the middle and 2 ft. 6 inches in height. They were found side by side with an intervening space of 1 foot 4 inches. The thickness of the bigger urn is $11/16$ inches, while that of the small one $\frac{1}{2}$ inch. The bigger urn has all round it a ring chain with parallel symmetrical ends. There were two more cists in a stone circle whose circumference was 85 feet. Trial diggings were also made at Velimalai in South Travancore, where they brought to light twenty sepulchre urns. Two of them were unearthed from one of which two iron axes were discovered. The pottery of the burial urns at Vandiperiyar and Velimalai is not painted and has very little decoration. The larger urns have a chain pattern or bead pattern drawing on the exterior close to the mouth. The smaller pots found inside are of the thin slip variety. Two of the smaller pots inside were wide mouthed with deep narrow bodies and round bases. The relics unearthed at Velimalai may be ascribed to the early Iron Age and those, exhumed at Vandiperiyar to the neolithic period. Being half baked earthenware, they had become very fragile on account of being buried in damp earth and had all got so broken or cracked that they could not be removed.¹¹

11. Travancore Archaeological Administration Report, III M. R., pp. 8-10.

Further excavations and observations were made by Mr. Podaval in the Bison Valley. He discovered a group of four dolmens situated within two furlongs of the zig at the ninth mile sixth furlong stone of the main Devikulam-Periakanal road. These dolmens are parallel to each other and face southwards the Muttukad Valley. Only the third from the west is in a state of good preservation. A cist is also found adjoining these dolmens and has been considerably damaged. The measurement of the dolmen in good condition is as follows;—

	<i>Length</i>	<i>Breadth</i>	<i>Height</i>	<i>Thickness</i>
Capstone	10'	6½'		½'
Side stone right	7½'		5½'	½'
Backstone	5½'		5'	½'
Inside width	4½'			

The discovery of more dolmens was made on the Vened side of the Bison Valley on the Muttukad ridge. Of these, the first is a group of four dolmens, three in front facing south, and the fourth in the back facing east. The measurement of one of them is given below :

	<i>Length</i>	<i>Breadth</i>	<i>Height</i>	<i>Thickness</i>
Capstone	8½'	5'		¾'
Side stones	7½'	3½'		1½'
Back stone	3½'	4½'		½'
Inside width	3½'			

The other dolmens are more or less of the same dimensions. The front of this dolmen is covered by a standing stone 4" × 3' × 4" thick. A dismantled rubble

masonry surrounds this group and the inside is paved with stone slabs.¹²

At Thondimalel, Mr. Swandere excavated six of the graves found on hill tops. They were situated in a straight row, the graves being placed close to one another. After removing the broken stones that marked the spot was found a flat circular stone that gave a hollow sound to a light tapping with a crow bar. Underneath it was found a large urn, the mouth of which was 15" in diameter and the vertical height about 3½ ft. placed in a vertical position in the ground firmly embedded in clay and gravel. Each of the large urns contained eating and drinking vessels, vases, chattis of various sizes and shapes, some of red clay, others black polished both inside and outside, of very thin material and very brittle to handle. They were firmly embedded in fine red clay that seemed to have silted in and partly filled up the large urn, and the small vessels were filled with the same clay very tightly packed, and were wedged in upon one another in such positions as to make it very difficult to remove them unbroken. Bones were found embedded in the vessels in one urn, and bones crumbled and mixed with clay in others. The Doctor was able to identify one of the bones as the hip bone of a man. On the top of one urn was found the blade of a sword, almost completely rusted through about 2½' long with no sign of a handle. Inside the urn were found two spear-heads and what appears to be an iron chisel. The urn itself and the vessels found

12. Travancore Archaeological Administration Report, 1116 M. E., pp. 8-10.

inside conform to the various types of what is called "Iron Age Pottery" in the *Catalogue of Pre-historic Antiquities* in the Government Museum, Madras; some of which were taken from Tandigudi in the Palni Hills and other parts of the Madurai district but most of which are from the Nilgiris, the Coimbatore, Malabar and Tinnevely districts.¹³

The dolmens are still erected by certain tribes of India and Burma, the Khasi, the Munda, the Gonds, the Orsons, the Bhils of Central India, the Kurumba of the Nilgiris, and the Malayarayan of Travancore. In no case are the dolmens of the size characteristic of the pre-historic phase of civilisation. The earliest known examples are the largest. The dolmens in the Anjarad Valley and the Cardamom Hills bear out this point. Those found on lower elevations in the Ranni and Malayattur Reserves are smaller in size. The loss of culture in the case of the tribes who built megaliths is observed from the fact that the present day tribes do not usually display any tendency to construct dolmens in Travancore.

Dr. Rivers has brought out this feature very prominently among the Todas of the Nilgiris, where dolmens are largely found. They furnish us with an example of a tribe at a low level of material culture living in a district filled with remains of a fairly high civilisation. Sarat Chandra Roy has observed the same fact in Chota Nagpur and Cooper in Assam. In

13. Saunders, A. J., "Dolmens in the Palni Hills" (*Madras Mail Annual 1923*)



A miniature Dolmen of the Malayarayan (See p. 20)

Travancore, the Muthuvans and the Vellalas, who live in the dolmen area in Anjanad, evince no interest in them. In the case of Malayaravans who erect miniature dolmens, a loss of culture can be detected in that they do not manipulate large stones as their predecessors did. Travancore furnishes an example of the Anjanad valley to illustrate the loss of material side of culture and shows that regions now inhabited by them were once the scenes of thriving civilization.¹⁴

Menhir

Menhirs are found in parts of North Travancore on the Cardamom Hills. They are very few in number. Bruce Foote found some menhirs of moderate size in the Madura district, though without any markings. There is a miniature menhir, 3 feet high, at Marayur, called Vathamkolli. The State Archaeologist found four menhirs and a group of dolmens in the grassland by the side of the zig on the 9th mile 6th fourling stone of the main Devikulam-Periakanal road in a damaged condition. Trial diggings were made at two different spots on this site. The first was beneath a menhir 2' 7" in height from the surface, 3' 6" in width and 8" in thickness. The area dug was 10' x 8' or 80 square feet. After digging 1½ feet below the surface, a burial urn was found. It was covered by a stone slab 1' 11" square and 4" thickness which served as its lid. The measurements of the urn were:—

14. Kanjan Pillai, N., "The Census Report for 1931" (Travancore) & "The Travancore Tribes & Castes,"

Height:	3".
Diameter of rim:	1' 4½".
Thickness:	5".
Inner Diameter:	2' 4".

Inside was found a shabby, three broken pots and one iron axe 5½" long 3½" wide at the sharper end, 1½" at the other end and ½" in thickness. The objects measured were:—

- (i) One shabby, rid with round bottom; and in good condition with height 4½", thickness ½", and diameter 10½".
- (ii) One small pot broken blade, glazed, and with pointed bottom with height 3", thickness ½" and diameter 4½".
- (iii) One large pot (broken) with pointed bottom, glazed and black with height 5½", thickness ½", diameter 5½".
- (iv) One small glazed (broken) pot, top black, and bottom red, with height 5", thickness 3" and diameter 4½".

Excavations at other mounds revealed more or less the same result. The urns are found on examination to be coarse earthenware imperfectly baked and ornamented by a circular chain pattern or leaf pattern drawing on the rim. Their contents mostly consist of

earthenware domestic vessels, such as pots, pitchers, pot-stands, bowls, and flat bottomed chattis with red and black surface. The discovery of iron axe on the site of one menhir indicates that the monuments belong to the Iron Age.¹⁵ No modern cenotaph has the simple grandeur of a menhir. They are probably memorial stones.



15. The Transjordan Archaeological Report, 1911 M. E., pp. 14-17.

CHAPTER IV

Prehistoric Archaeology of the Cochin State

ARCHAEOLOGISTS owe a deep debt of gratitude to the late Dr. L. K. Ananthakrishna Iyer and the State Geologist Mr. K. K. Sen Gupta for their contributions in the field of prehistoric archaeology of the Cochin State.

One class of sepulchral monuments found in the Cochin State is *kodakallas* or umbrella stones, which are really dolmens. In Eyyal, a village 17 miles from Trichur, about 35 dolmens were found: only three of them were found in tact, while the capstones of the rest have been pulled down. Two of the former are very similar in size, while the third is a little smaller than the other two. The capstones rest on four slightly inclined strong laterite supports measuring $\frac{1}{2}$ feet in height above the ground and $11\frac{1}{2}$ feet in diameter at the base and have a circumference of 36 feet. The verticals are rudely triangular laterite stones with the base underground. They are 3 feet in height from the apex to the middle of the base which is 5 feet long, while the other measures 7 ft. and $4\frac{1}{2}$ ft. above ground respectively. Excavations unfolded vessels of the most fragile stoneware and a few bits of bones not easily distinguishable were obtained. "Numerous *kodakallas* and *topi-kallas* are found in a village adjoining the Vellarakeel busti, half a mile north-east to the 9th mile stone on the road from Wadakkancheri to Kunnapatnam,

some of them being in a good state of preservation. The place is a regular Stone-henge but on a miniature scale consisting of hat-stones and umbrella-stones in place of dolmens, menhirs, and cromlechs. Flat stones with both plano-convex and flat circular capstones are found near Puthia Angadi and Manjeri (Munad taluq, Malabar district) respectively.¹⁰

Numerous are the dolmens found on the Cochin hills. They are generally of a rectangular pattern formed of single slabs of granite verticals on the sides and flagged at the bottom by similar slabs with a large superincumbent block which is rough and unhewn. The one opened by Dr. L. K. A. Iyer had two cells partitioned by a single slab of granite 8" thick with a circular ring about 12" in diameter. The two slabs extending east to west were 7' long and 4' broad and were very thick and massive. The interior dimensions were 6' 3" x 3' 7". Excavation of one of the cells showed two big burial urns filled with earth. They could not be removed unbroken. The other cell yielded two jars filled with earth and chattis in a broken condition. They are said to be wheel-made and free from decoration except a few lines of simple mouldings around the rim of the lid and the neck and the base of the urn. No lid covering the mouth of any of them was found, but they were packed to the brim with fine red earth which is originally said to have been poured into them in the form of liquid and which must have later become transferred into a small mass similar in shape to the urn.

10. Sen Gupta, K. K., "Megalthic Monuments of the Cochin State" (J. I. A. I.), p. 106

It is in this mass of earth that bone bits, vessels, and beads are found embedded. The smaller vessels may have contained offerings for the spirit of the dead and the circular hole in the middle slab must have been the passage through which the spirit was allowed to take the offerings. The iron implements placed in the grave represented the tools used by the men during their lifetime."

Mr. Sen Gupta found dolmens round about Mukkathode and on both sides of the tramway to Parambikulam. They are small cellars built of three upright slabs of stones with a capstone measuring $2 \times 1\frac{1}{2} \times 1$ cubic yards, where it is said some monks (sages) passed their days in prayer and meditation. Trial excavations resulted in disappointments, as no human bones were found. In general, the entablature stones are observed with their plain faces downward or upward. The entrance to the dolmens is invariably directed to the west, there being no doors either with a circular, oval, or rectangular aperture as are observed in France or in other parts of the world. Most of them are simple and no evidence is observed as to their being covered with a cairn or tumulus."

Mr. Gupta also found a dolmen $8\frac{1}{2}' \times 8' \times 4'$ on the edge of Muniara Thanda, north of Anapenthan. The capstone is irregular and fractured at the

17. The reader's attention is invited to the South Indian Oriental Encyclopaedia where Dr. L. K. A. Iyer has dealt with the Cochin Prehistoric Archaeology.

18. Sen Gupta, K. K., "Megolithic Monuments of the Cochin State". pp. 107—108

north-east corner. The slabs consisted of banded gneiss. No stone floor is observed and in this characteristic it resembles most of the dolmens of the State. The dolmen at Koothandam Thandu is the only one in the State that has all its sides enclosed by slabs, but the western one has a parabolic opening very neatly chiselled measuring $1\frac{1}{2}'$ high and $1\frac{1}{2}'$ wide at the lowest part and this is closed by a slab $2\frac{1}{2}' \times 1\frac{1}{2}'$ placed against it from outside. The inner apartments are $6'$ long $3\frac{3}{4}'$ wide and $2\frac{1}{4}'$ high. The capstone on the other hand is $9'$ long and $6\frac{3}{4}'$ broad. The stone floor is covered by 9 inches of soil which when removed increases the height of the parabolic opening to $2\frac{1}{4}'$ feet.

Menhir

Although the dolmens are a characteristic feature of the hills and jungles, the menhirs are conspicuous by their rarity. The only instance is the solitary row of menhirs at Komatapara Thala. The largest menhir consists of an irregular and flat upright monolith $12\frac{1}{2}'$ high, $7\frac{1}{2}'$ wide at the foot. Three other small monoliths form a straight row with the principal menhir in its north tilted to the west and the south. In India the form of the menhirs varies greatly in widely separated localities.¹⁹ Two menhirs were observed by Dr. Ananthakrishna Iyer in the Trichur taluq.

Burial urns are big earthenware pots filled with earth and found buried at a depth of a few feet from the surface. They are found in the forests of the plains,

19. Sen Gupta, K. K. "Megallithic Monuments of the Cochin State."

villages, and in the neighbourhood of towns. On excavation 14 of them were found in an area of 20 square feet in one locality. They were brittle and fell in pieces by their own weight soon as the surrounding earth was removed. One of them measured $2\frac{1}{2}'$ in height, $7'$ in circumference at the broadest point and 16 inches in diameter at the mouth. Examination shows iron implements, knives, and small swords in a crumbling state and fragments of bones. Beads and bracelets which must have been worn by women were also found in some of the urns. Pottery of various forms, vases, basins, cups, small vessels of antique and graceful forms all filled with earth were seen in them. Some of the vessels were neither glazed nor ornamented. It must, therefore, be inferred that they belonged to a comparatively early date. The smaller ones have a kind of glossy appearance. This seems to have been caused by rubbing the surface with a mucilaginous gum of *Abutilum indicum*.²¹

The suggestion that the construction of the dolmens may be attributed to Jaina ascetics should be taken for what is worth. Dr. Subramonia Iyer of Travancore cites the case of the dolmen at Santanpara believed to have been the abode of a hermit Santan by name. Mr. Gupta says that the hermit Santan must have used the pre-existing dolmen and turned it to his own use just as hermit crabs take shelter in shells of gastropods. Ananthakrishnan Iyer speaks of a reported discovery of a trident, a lamp and hooks in a dolmen.

20. L. K. A. Iyer, "Pre-historic Archaeology of the Cochin State" (South Indian Oriental Encyclopedia).

and if the report is true, the reason for their occurrence could be found in the explanation suggested above. Jacques Boyer thinks that the numerous polished stone-hatches, pieces of crude pottery, granite mill-stones, and primitive tools found in the vicinity indicate that the cromlechs served some other purpose than mere encirclement of funeral mounds. They invariably have openings facing west, a fact of which significance and importance bearing on the mode of disposal of the dead. "The thick-lipped, small-bodied Kadars, lords of the hills, are considered by Sir W. W. Hunter, as the remnant of a higher race than the Pulayas and the Maduvars of the Annamalais. These hills now very thin peopled, abound in the great stone monuments which the primitive tribes used for the dead".²¹

21. See Gupta, K. K. "Megalithic Monuments of the Cochin State", pp. 110-111.

CHAPTER V

Pre-historic Monuments in Malabar *

ROCK-CUT cave-tombs are found in Cheemupara and Parambantalil hills. Babington was the first to discover such tombs in 1819 and Rea in 1910, but their descriptions lacked details. Professor Jouvehu-Dubreuil was the first to draw attention to the very great interest attached to these rock-cut tombs by assigning to them a Vedic origin. The surface indication for the underground tomb is a circular or square slab of stone covering the top opening. The tombs explored by Babington had symmetrically arranged stone-circles as in typical cairns and urn burials, that is, those at Adittacallur. At Feroke and Parambantalil there has been too much interference for the stone circles to stand. The capstone stands out prominently and is quite unmistakable.

Popularly these rock-cut tombs and simple funerary monuments are considered to be places of *samadhi* of sages. A Malayali poet ascribed them to Buddhists. The places where Buddha sages attained nirvana are still to be seen everywhere at Kuttakalla. They are rendered unmistakable by the rosary of beads, the lamps, arrows and earthenware that are found in them.

* The author is indebted to Dr. A. Ayyappan's paper on Rock-Cut Cave-Tombs at Feroke, S. Malabar read before the Indian Science Congress in 1933 for information relating to Malabar.



Circular Capstone exposed in Malabar (See p. 26)
(By the Courtesy of Dr. A. Ayyappan)

The large pyriform urns are supposed to have been for in-urning aged people alive when they were reduced by sheer senility to a frog-like shape and hopped about. It is said that the oldest son would put the frog-like father in an urn with sufficient food to last him for a pretty long time and bury the urn with proper rituals. *Nannamadi* is the name for such a burial urn. In the opinion of Dr. Ayyappan, the Buddhist tradition is more reasonable.

Popular traditions are not at all helpful to us in getting an idea of the significance of the rock-cut tombs. So far as numbers go, they run to thousands in each taluk of Malabar, Cochin and Travancore. Dolmens and other purely megalithic structures are few and far between. Rock-cut tombs are more numerous than dolmens and were considered to be a variant of the megalith. Architecturally, Malabar is even today a backward area in South India; in funerary architecture too the forebears of the modern Malayales may have been easy going and heterodox.

The simplest excavations in laterite for burial purposes in Malabar are square or circular pits to receive large pyriform urns. Then we have the slightly more complex *Kutakallu*—a hollow large enough for an urn with a ledge cut over the hollow for placing minor funerary articles and a flight of two or three steps leading from the surface level to the urn. A seat for the dead is a feature of many of the dolmens in common with the Perak tombs and similar stone caves. Cremated remains have been found in many unmistakable dolmens, so that, in fact, there is little evidence

to dissociate the rock-cut tombs of Feroke from the general South Indian megalithic culture complex. The presence of a tripod found in Feroke is not said to imply fire-worship. Professor Dubrenil is of the opinion that the rock-cut tombs are 'Vedic remains surviving in the seclusion of Malabar, but Dr. Ayyappan differs from it. Taking the crudeness of the pottery and the absence of bronze into consideration, the Feroke tombs are considered to be slightly earlier in age than the Sular graves which have been fixed at about 200 B. C.

The human remains found in megalithic monuments in India have been sometimes buried, but perhaps more frequently cremated. Occasionally, a single sepulchre contains traces of burial as well as cremation. Instances of urn burial of the whole body are met with in Sindh and Tinnevely. Large jars narrow at the neck and pointed at the bottom were used and the body must have been reduced in bulk by dissection or pounding before it could be passed through the narrow neck. Similar jars are found in Babylonia where they are coated with bitumen, a black smear or false prepared from the juice of *Abutilon indicum*. Burial is supplemented by other precautions against the return of the ghost. According to Frazer, the practice of placing stones over the corpse may have a similar origin; graves are provided with mounds, tomb-stones or enclosures in order to keep the dead from walking or to prevent the ghosts from returning to their old haunts."

22. Westermarck, Edward, "Origin and Development of Moral Ideas", p. 541.

The mode of disposal of the dead by burial is one of considerable antiquity. Macdonell and Keith hold that the epithet 'agnidagdhab' applies to the dead who were burnt in a funeral pyre; the other custom being burial 'anagni dbagdh' not burnt with fire. They also refer to 'paropthah' 'casting out' and 'uddhita', exposure of the dead. They add that burial was not rare in the Rig-Vedic period." A stone is set up between the dead and the living to separate them." Manimekhala, Tolkaṭṭam and Peruḷadigaram afford a valuable mine of information regarding the methods of disposal of the dead in Pre-Brahmanic days. They are very old Tamil works said to have come into being about the eighth century A. D. Some scholars give them an earlier antiquity. The practice of erecting monuments in honour of the dead must have belonged to the non-Aryan tribes known as Mlecchas, Rakshasas, Dasas, and Nishadas who were the Pre-Dravidians. There are references to this custom in Tolkaṭṭam and Paranaṇuru. "Oh, the potter who makes earthenware, do please prepare the urn meant finding out of a fit stone to be set up in memory of the deceased hero." It is possible that the cremating people may have been the Aryans who are said to have entered India about 2000 B. C.

23. Carpenter, J. A., "Comparative Religions" p. 39.

24. Macdonell, D. A., "Indian Myths and Legends" (Introduction) pp. 32-37.

CHAPTER VI

Age of Megalithic Monuments

ANTIQUARIANS after careful researches have been able to divide megalithic monuments into three classes according to their contents :—

- (i) The tumuli of the Stone Age are considered to be the most ancient. They are often of great size and are distinguished by circles of stones and stone-chambers in which are found the remains of unburnt bodies with objects of stone and amber. The dolmen opened by Ward and Cogger contained no implements, and probably belonged to the Stone Age. This represents the lowest state of civilization before the introduction of metals.
- (ii) The tumuli of the Bronze Age contains relics of burnt bodies, vessels, and implements, and ornaments of advanced civilization. Tumuli of this period are rare in Kerala, but it appears that Mr. Bourdillon once picked up a bronze lamp which probably belonged to one such tumulus.
- (iii) Tumuli of the Iron Age are the most recent and represent a comparatively advanced state of civilization. Iron implements, swords, spear-heads, and highly polished vessels are found in them. Excavations made in Kerala go to show that all the tumuli are of the Iron Age.

The crucial point for consideration is the probable time of the Iron Age. This is a knotty problem, and it is only possible to fix the time approximately. Iron was known to the Vedic Aryans from very early times. In the opinion of Mr. A. C. Gupta, the age of the Rig-Veda has been set down to Miocene or at any rate the Pliocene or Pleistocene epoch.²⁵ Though the estimate is based on internal evidences, such remote antiquity has not attained the rank of scientific certainty. Macdonell's estimate may be taken as correct. The Iron Age in India may be fixed as being prior to 2000 B. C.

Significance of Dolmens

Major Munn claims that the dolmen-builders of the Deccan were mining for gold, copper, iron and diamonds. He points out that the two districts where the dolmens are the thickest are Bellary and Dharwar, which are riddled with old workings of gold, copper, and iron. The Anjanad valley is the home of a large concentration dolmens. The spade of the geologist can alone determine what the mineral contents of the soil are in Anjanad. The late Mr. Vincent Ball says that gold-washing, as practised in India, is an example of human degradation. The Gonds of Central India are assiduous gold-workers. They still erect miniature

25. Gupta, A. C. "Rig-Vedic India", Vol. I.

dolmens and thus show strong signs of continuity with people of the archaic civilization. The Kurumbas of the Nilgiris are the chief gold washers of the Madras Presidency dating from 500 B. C. The Malayarayang of Travancore, according to Walhouse, make imitation Kistans of small slabs of stone in the Ranni Reserved forests, but gold washing is not in evidence. It may have become a forgotten art.

Megalithic monuments in different parts of the world present such a uniformity of structure that it is hardly compatible with the theory of their independent origin. Montelius focusses attention on the continuous influence of the east on the west from remote times. Fergusson thinks that the dolmen-builders were Dravidian in origin. Baggeri strikes a different note and opines that they are Veddoid or Australoid in origin, and between the Mundas of the north and the Veddas of the south there intervene the Kurumbas, Irulas, the Muthuvans, and the Uralis representing the Pre-Dravidians, who once spread over the whole of India and later came under the influence of the Dravidians and the Aryans. According to Flinders Petrie, the date of the Pre-Dravidian culture is about 2500 B. C. This view is confirmed by Perry who holds, "all the world over, the dolmens present such similarities of structure that they must have been the work of a people, showing a common culture." Beyond

25' Perry G. T., "Megalithic Culture of Indonesia".

Indonesia which includes among other areas, Assam and Burma, megalithic monuments are in evidence in the region of the Mundas of Chota Nagpur, the Todas of the Nilgiris, and the hill tribes of Travancore.

Conclusion

Palaeontological evidence also supports the theory of the common origin of megalithic monuments. No skeletal remains have been so far unearthed to bear any direct evidence of the Negrito race in Travancore. "Judged by the nature and the contents of objects found, the megalithic remains of the Deccan and Southern India are post Vedic and later than any similar remains of the Central Indian Plateau, from where the culture would seem to have spread southwards." Two fossil remains have been found in India, the Bayana cranium and the Sailkot cranium. Dr. Keith is of opinion that they are of a Veddaic type which represents the Pre-Dravidian (Proto-Australoid) people. The excavations of Mohenjo-daro and Harappa reveal that one of the skulls is proto-Australoid. A correspondence in type is revealed by one of the South India skulls at Adittanallur which is called Proto-Australoid by Elliot Smith.²⁷ The physical characteristics observed in the skulls are found among the

27. Hutton, J. H., "Census Report for India", 1931, Vol. 1., Part III, Pp. lxx-lxxii

28. *Ibid.*, p. lxxix.

existing South Indian tribes and among the Veddas of Ceylon. "There is a remarkable similarity between these and the skeletons found in the tumuli of Great Britain, France, and Germany which exhibit features of a dolichocephalic people."²⁹ Thus the uniformity in the structure of the monuments is marked by a uniformity in the structure of the contained skeletons which belong to a dolichocephalic people.

While Pre-Dravidian is their time-honoured appellation, Eiskstedt would call them Vedic, and Dr. Guba, Nishadic. Dr. Hutton has labelled them Proto-Australoid after Sewall. Though the Pre-Dravidian has for long stood the test of time, it is but fitting that the term Proto-Australoid should continue.

29. Newbinger, "Modern Geography" pp. 203—204.

INDEX

A		F	
	Page		Page
Atba Brazil	3	Ferguson	2, 34
Adichuvallur	28, 25	Feroke	28
Amarnavathi	14	Flinders Petrie	34
Anantakrishnaiah, L. K.	8, 22, 28	Frazer, Sir James	30
Anjanad	6, 7, 11		
Ayyappa, A.	8, 28, 30		
B		G	
Babington	28	Gokarnam	4
Babylonia	30	Gond	18, 22
Bayana	25	Gopinath Rao	11
Bellary	7	Guba, R. C.	28
Bhill	18	Gupta, A. C.	28
Billa Sargam	9		
Bison Valley	18	H	
Boristo	12	Harappa	25
Boule	2	Hellmuth de Terra	3
Bourdillon	22	Hunter	27
Brooks	3	Hutsen, J. H.	25
Bronze Age	23		
Bruce Foote	3, 10	I	
C		Indonesia	25
Qaedamom Hills	6	J	
Qauvery	14	Jagges Boyar	27
Chetamapara	28	K	
Chokkanad	8	Kadav	27
Cochin	23	Kadukuthi	18
Cooper	18	Kan yakumari	4
D		Keith Arthur	25
Dolmen	13, 22, 29	Kerala Mahatmyam	4
Dubreuil	28, 30	Keralapathi	4
E		Khasi	18
Elskeddt	28	Koda Hallu	22
Ellet Smith	25	Komalapara Thala	25
Eyyell	22	Koosandan Thanda	25
		Kurumba	18, 24

	L	Page		Page
Lozan	M	2, 7	Rig-Veda	33
			Rivers	18
			Roy, Sarat Chandra	18
			Ruggeri	54
			S	
Madonadi		11, 31, 33	Safliyat	25
Malayarajan		13, 18, 34	Samantha	4
Malapantaram		9	Samudera	17
Malapukaya		12	San Gupta, K. K.	3, 23, 24
Malayalur Reserve		14	Sindb	33
Manimakkala		31	Stuckley	12
Marshall		3	Subramania Iyer, N.	26
Mateer		13	T	
Menbir		8, 19, 35	Tandikudi	19
Mohenja Daro		8, 35	Taylor, Colonel Meadows	8, 19
Montilias		54	Tengakudi	14
Morgan		1	Theendimalai	17
Mukunthode		24	Thiruvally	36
Munda		18, 34	Todas	19, 25
Muniarathanda		24	Tolkapitum	11, 31
Mura		39	Theendimalai	17
Mushuvva		10, 27	Theppikkalin	22
	N		Tournal	9
Nannanadi		39	Trichur	4
Nestithia		10	U	
	O		Urali	13, 34
Orion		18	V	
	P		Vadavampara	14
Palacolithia		9	Valiridu	11
Pambanar		6, 14	Vandiperiyar	14, 16
Pambadan Mitra		3	Varkala	8
Pandukushlas		8, 11	Vasudeva Padural	3, 19
Pasambuvadi		28	Vathamkotti	19
Pasambikulam		24	Veddas	6, 34
Pasamunna		4	Valimale	16
Perry		34	Vellala	12, 19
Portothalgara		14	Vemul	16
Pre-Davidian		30	Vincent Ball	33
Pondaligeram		31	Vivamitra	4
Preo-Australoid		35	W	
Puravannuru		11	Walhouse	12, 34
	R		Ward and Conner	7, 22
Ranal		12, 13	Woolly, Sir Leonard	2
Roa		23		

Of the Same Series:

KERALA—Past & Present

VOL. II. THE PRE-DRAVIDIAN PERIOD

VOL. III. THE DRAVIDIAN PERIOD

VOL. IV. THE ARYAN PERIOD

VOL. V. MARRIAGE INSTITUTIONS

To be out soon:

TRIBES & CASTES OF COCHIN
(With Tribes Class)

